SERVICE MANUAL

FOR

MODEL WPP-531-F-AA

HANDS FREE WEATHERPROOF TELEPHONE

OR

MODEL SSP-511-F-AA

HANDS FREE PANEL TELEPHONE

EQUIPPED WITH SPK1.07 UNVLr1 FIRMWARE

AND

AUTO-ANSWER FEATURE

CEECO

Serving the Telephone Industry Since 1930

Communication Equipment
& Engineering Company

519 W South Park Street
Okeechobee, FL 34972
Voice: -863-357-0798
Fax: - 863-357-0006

IMPORTANT INFORMATION FOR CUSTOMER

Please fill in before you continue.

The following information is necessary when calling CEECO for assistance.

MODEL NUMBER	MODEL WPP-531-F-AA OR SSP-511-F-AA, EQUIPPED WITH SPK1.07 UNVLr1 FIRMWARE
SERIAL NUMBER	
DATE MANUFACTURED	
LOCATION INSTALLED	

For us to better serve you, please have this information available when calling for technical support.

CEECO

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519 W South Park Street
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1.0 INTRODUCTION

The practices in this manual provide installation and maintenance information for the CEECO Model WPP-531-F-AA or SSP-511-F-AA Telephone with SPK1.07 UNVLr1 firmware and Auto-Answer feature.

The information in this manual is subject to change without notification.

For information not included in this manual, please call or write:

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2.0 GENERAL

2.1 The CEECO hands free telephone is a sturdy, vandal resistant, Stainless Steel Panel Speakerphone. Instead of a hookswitch and handset, the telephone has a Press to start/Press to stop button for initiation and termination of phone calls.

2.2 This telephone is equipped with an auto-answer feature, which allows it to be called from a remote location and answer itself after a selected number of rings. This allows the phone to be utilized to monitor the area in which it has been installed, or provide two-way communication. The microphone is muted during dial tone eliminating the use of hand held dialers.

2.3 Incoming calls may be allowed or blocked depending on the programming.

2.4 Programming is accomplished via the DTMF keypad.

2.5 The WPP-531-F-AA comes with the cast aluminum weatherproof housing, whereas the SSP-531-F-AA is the panel telephone without the housing.

3.0 PROGRAMMING:

NOTE: It is recommended that you ground yourself to prevent ESD damage to the PCB(s).

3.1 **Connect the phone** to a working telephone line or a DTMF test set before programming.

3.2 Move the **mini-jumpers** (located on the Printed Circuit Board) to the **"ON"** position, as depicted on the last page of this manual.

3.3 **Press the CALL button** and wait for dial tone before programming any digits.

3.4 Each programming memory location is accessed by dialing the "#" sign and a two digit code. The previous contents of the location are automatically erased when the location code is accessed.

NOTE: Once the "#" (pound) key has been entered you may get an operator recording or a fast busy, please disregard and continue programming.

3.5 **Enter #97#18#** to **clear all** user programmable memory.

3.6 **Enter #00** to access the telephone options location. It is comprised of ten selected digits, all of which must be filled to render the phone functional. By entering 0-9 for each of the 10 digits represented on the following page, the phone is customized to a particular installation. **Enter the ten (10) selected digits** now.

PROGRAMMING CONTINUED…

Enter your selections here for future reference:

#00 __ __ 0 __ 0 0 1 __ 0 5

Digit 1:
0 Call restrictions are in effect. (Default)
1 No call restrictions.

Digit 2:
0 No incoming calls allowed.
1 Incoming calls allowed.

Digit 3:
0 **Always 0 for this model**

Digit 4:
0 No Conversation Time-Out.
1-9 Minutes Conversation Time-Out (Select a value from 1 to 9 minutes).

Digit 5:
0 **Always 0 for this model.**

Digit 6:
0 **Always 0 for this model.**

Digit 7:
1 **Always 1 for this model**

Digit 8:
0 Do not dial PBX access number #l8
1 Dial PBX access number stored in Location #18 For ***Call*** Button

Digit 9:
0 **Always 0 for this model**.

Digit 10:
0 No Wink Detect
l-9 Length of Wink Detect (l = 50ms incremental to 450ms)
(entering **5 is recommended**)

PROGRAMMING CONTINUED…

EXAMPLE:

DIAL #00 0102001005

Phone will be set as follows:

DIGIT 1 .. CALL RESTRICTIONS IN EFFECT
DIGIT 2 .. INCOMING CALLS ALLOWED
DIGIT 3 .. ALWAYS 0
DIGIT 4 .. 2 MINUTE CONVERSATION TIME OUT FOR CALL BUTTON
DIGIT 5 .. ALWAYS 0
DIGIT 6 .. ALWAYS 0
DIGIT 7 .. ALWAYS 1
DIGIT 8 ..DO NOT DIAL PBX NUMBER STORED IN LOCATION #18
DIGIT 9 .. ALWAYS 0
DIGIT 10 . 250ms WINK

3.7 If the telephone must automatically dial **(Auto Dial)** a number when the **BLACK CALL BUTTON** is pressed, **enter #18 followed by the desired number.** Otherwise, proceed to the next section.

#18 ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

The number can be from 1 to 11digits. Any number stored in Location #18 will automatically dial first when the black "Call" button is pressed.

3.8 If **Speed Dialing** is desired, forty (40) locations are available **(#30-#69).** Simply **enter each location** that will be used **followed by the desired number**. Otherwise, proceed to the next section. The numbers can range from 1 to 11 digits. Be sure to record these numbers in section 4.2 for future reference.

EXAMPLE:

Enter **#30**18005551212 in the programming sequence. When in normal operating mode, the user dials #30 and the phone will Speed Dial 1-800 555-1212.

3.9 If the phone is intended to **restrict certain calling patterns**, then it must be programmed to tell it specifically, which calls to allow. If this is not desired, proceed to the next section. There are twenty (20) locations available **(#70-#89).** Simply **enter each location** that will be used **followed by the desired/allowed number**. The numbers can range from 1 to 11 digits. Be sure

to record these numbers in section 4.3 for future reference. Review the examples below:

PROGRAMMING CONTINUED…

NOTE: The * (Asterisk) symbol is defined as a wildcard. A wildcard allows any digit (0-9) to be emitted from the keypad.

#70 0-***-***-****	Allows all 0 minus and 0 plus calls.
#71 1-555-1212	Allows 1-555-1212 information calls.
#72 911	Allows 911 emergency calls.
#73 1-800-***-****	Allows 1-800 calls.

3.10 AUTO-ANSWER FEATURE

To program the auto-answer feature locate the **660-650 Printed Circuit Board** under the large (660-000) main printed circuit board. Refer to the diagram on page 20 of this manual. Move the **mini-jumper** to the **desired ring count**, from 1-9.

RING COUNT	
0	No auto-answer
1	Answer after 1st ring
2	Answer after 2nd ring
3	Answer after 3rd ring
4	Answer after 4th ring
5	Answer after 5th ring
6	Answer after 6th ring
7	Answer after 7th ring
8	Answer after 8th ring
9	Answer after 9th ring

When in operation, the telephone may be called from a remote location and it will automatically answer itself after the number of rings, as selected above. The telephone comes from the factory set to answer after one ring, but this may be adjusted as stated above.

NOTE: The telephone may be manually answered any time prior to the activation of the auto-answer feature, at which time conversation may take place. Example: if the phone is set to auto-answer after nine rings, a person at the telephone may answer on rings 1-8. At that time, conversation could take place.

3.11 When programming is finished, return the **mini-jumpers** to the **"OFF"** position. Then return the phone to an “on hook” state (no dial tone), by pressing the black "CALL” button.

4.0 PROGRAMMING TABLES

4.1 SPEED DIAL TABLE

#30 _ - _ _ _ - _ _ _ - _ _ _ _	#50 _ - _ _ _ - _ _ _ - _ _ _ _
#31 _ - _ _ _ - _ _ _ - _ _ _ _	#51 _ - _ _ _ - _ _ _ - _ _ _ _
#32 _ - _ _ _ - _ _ _ - _ _ _ _	#52 _ - _ _ _ - _ _ _ - _ _ _ _
#33 _ - _ _ _ - _ _ _ - _ _ _ _	#53 _ - _ _ _ - _ _ _ - _ _ _ _
#34 _ - _ _ _ - _ _ _ - _ _ _ _	#54 _ - _ _ _ - _ _ _ - _ _ _ _
#35 _ - _ _ _ - _ _ _ - _ _ _ _	#55 _ - _ _ _ - _ _ _ - _ _ _ _
#36 _ - _ _ _ - _ _ _ - _ _ _ _	#56 _ - _ _ _ - _ _ _ - _ _ _ _
#37 _ - _ _ _ - _ _ _ - _ _ _ _	#57 _ - _ _ _ - _ _ _ - _ _ _ _
#38 _ - _ _ _ - _ _ _ - _ _ _ _	#58 _ - _ _ _ - _ _ _ - _ _ _ _
#39 _ - _ _ _ - _ _ _ - _ _ _ _	#59 _ - _ _ _ - _ _ _ - _ _ _ _
#40 _ - _ _ _ - _ _ _ - _ _ _ _	#60 _ - _ _ _ - _ _ _ - _ _ _ _
#41 _ - _ _ _ - _ _ _ - _ _ _ _	#61 _ - _ _ _ - _ _ _ - _ _ _ _
#42 _ - _ _ _ - _ _ _ - _ _ _ _	#62 _ - _ _ _ - _ _ _ - _ _ _ _
#43 _ - _ _ _ - _ _ _ - _ _ _ _	#63 _ - _ _ _ - _ _ _ - _ _ _ _
#44 _ - _ _ _ - _ _ _ - _ _ _ _	#64 _ - _ _ _ - _ _ _ - _ _ _ _
#45 _ - _ _ _ - _ _ _ - _ _ _ _	#65 _ - _ _ _ - _ _ _ - _ _ _ _
#46 _ - _ _ _ - _ _ _ - _ _ _ _	#66 _ - _ _ _ - _ _ _ - _ _ _ _
#47 _ - _ _ _ - _ _ _ - _ _ _ _	#67 _ - _ _ _ - _ _ _ - _ _ _ _
#48 _ - _ _ _ - _ _ _ - _ _ _ _	#68 _ - _ _ _ - _ _ _ - _ _ _ _

#49 _ - _ _ _ - _ _ _ - _ _ _ _ #69 _ - _ _ _ - _ _ _ - _ _ _ _

PROGRAMMING TABLES CONTINUED…

4.2 ALLOWED CALLS TABLE

#70 _ - _ _ _ - _ _ _ - _ _ _ _

#71 _ - _ _ _ - _ _ _ - _ _ _ _

#72 _ - _ _ _ - _ _ _ - _ _ _ _

#73 _ - _ _ _ - _ _ _ - _ _ _ _

#74 _ - _ _ _ - _ _ _ - _ _ _ _

#75 _ - _ _ _ - _ _ _ - _ _ _ _

#76 _ - _ _ _ - _ _ _ - _ _ _ _

#77 _ - _ _ _ - _ _ _ - _ _ _ _

#78 _ - _ _ _ - _ _ _ - _ _ _ _

#79 _ - _ _ _ - _ _ _ - _ _ _ _

#80 _ - _ _ _ - _ _ _ - _ _ _ _

#81 _ - _ _ _ - _ _ _ - _ _ _ _

#82 _ - _ _ _ - _ _ _ - _ _ _ _

#83 _ - _ _ _ - _ _ _ - _ _ _ _

#84 _ - _ _ _ - _ _ _ - _ _ _ _

#85 _ - _ _ _ - _ _ _ - _ _ _ _

#86 _ - _ _ _ - _ _ _ - _ _ _ _

#87 _ - _ _ _ - _ _ _ - _ _ _ _

#88 _ - _ _ _ - _ _ _ - _ _ _ _

#89 _ - _ _ _ - _ _ _ - _ _ _ _

EXAMPLE:

#70 0 - * * * - * * * - * * * *
Allows all 0 minus and 0 plus phone calls.

#71 9 - 1 1 _ - _ _ _ - _ _ _ _
Allows 911 emergency calls.

#72 1 - 8 0 0 - * * * - * * * *
Allows 1-800 calls if set in option table.

#73 1 - 4 11 - _ _ _ - _ _ _ _
Allows 1411 information calls.

#74 0 - 8 0 0 - * * * - * * * *
Allows 0-800 calls if set in the option table.

5.0 OPERATION

5.1 To make a call, press the black "CALL" button located on the front of the phone. The LED illuminates red at this time. When dial tone is received, the transmitter is muted and the phone waits for numbers to be dialed.

5.2 After the call is complete, press the "CALL" button again to terminate the call. If user does not press the "CALL" button when he or she is finished using the phone, then the phone will hang-up after detecting a WINK (momentary open) or when the timer times-out, if it was so programmed. The LED will go out at this time.

5.3 If digit 1 of Location #00 is "0", then call restrictions are in effect. The numbers that may be dialed are restricted to the numbers entered into Location #70-#79. If the number dialed is not in the Location #70-#79, then the phone gives three tones and drops the line.

If digit 1 of Location #00 is "1" then there are no restrictions and any number may be dialed.

6.0 RECOMMENDED TOOLS AND TEST EQUIPMENT:

DTMF Test Set
Volt/Ohm Meter
3/8" Nut Driver
5/16" Nut Driver
Flat Blade Screw Driver
Security Tool, CEECO Part Number 301-064

7.0 INSTALLATION NOTES AND ASSEMBLY INSTRUCTIONS:

7.1 Using a 301-064 security tool (sold separately), loosen and remove the security screws.

7.2 The security tool is for a standard 5/32" button head screw generally used on the framework of the phone booths.

7.3 Separate the faceplate assembly from the weatherproof housing by pulling the faceplate forward.

7.4 Run the inside station wire into the enclosure and terminate on the RJ11C terminal block inside, as depicted on the following page. The CEECO provided terminal block (jack) **must** be used, as it contains required over-voltage protection circuitry.

7.5 The use of a gas tube station protector is recommended. The station ground should not exceed 50 ohms.

7.6 Plug the modular line cord from the faceplate assembly into the RJ11C terminal block.

7.7 Dress the telephone line cord and AC cable away from the security screws and seat the faceplate into the weatherproof housing.

7.8 Secure the cover assembly by tightening the security screws.

*****WARNING*****

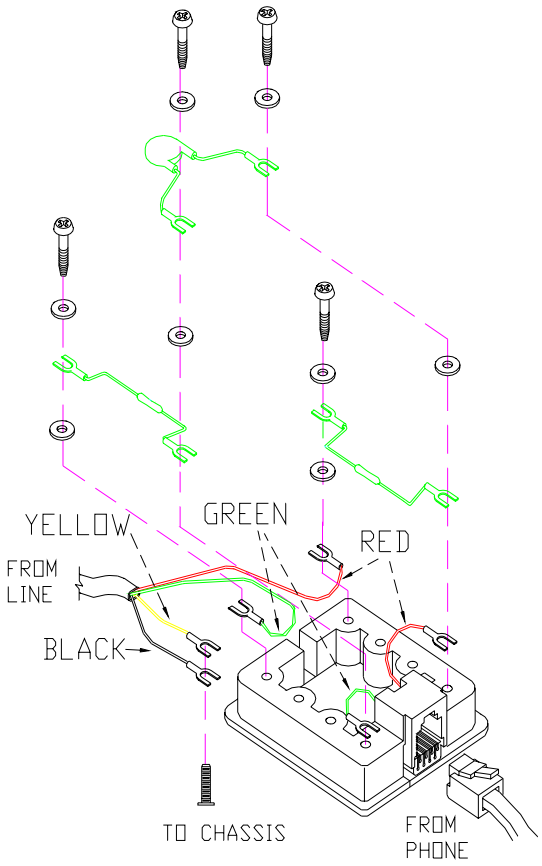
A. Never install telephone wiring during a lightning storm.

B. Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.

C. Never touch non-insulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.

D. Use caution when installing or modifying telephone lines.

7.9 OVER-VOLTAGE PROTECTION DIAGRAM



PROPRIETARY

CONFIDENTIAL

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8.0 TESTING:

Action: Connect the phone to a working phone line or DTMF test set.
Press the black "CALL" button.

Reaction: Red LED and Dial tone.

Action: Dial a number.

Reaction: The called party answers.
A normal speakerphone conversation is allowed.

Action: Finish the conversation.
Press the "CALL" button, or wait until time-out occurs
(if programmed as such).

Reaction: The call is terminated and LED goes out.

NOTE: If the telephone was programmed to restrict calls, it should only allow the numbers to dial as it was programmed. Attempts to dial any other numbers should result in a three-tone error signal followed by the telephone dropping the line and resetting itself.

Action: Call the telephone from a remote/other location.

Reaction: The telephone should answer itself after the number of rings previously selected. Upon automatically answering, the telephone provides an open microphone. This allows the area of the telephone to be monitored for sound.

Action: Hang up the calling telephone.

Reaction: The CEECO telephone will reset, upon receiving the wink back.

9.0 SPECIFICATIONS:

INPUT POWER:	C.O. LINE POWERED (48v-52v Loop)
LOOP CURRENT:	40ma. MIN. 80ma. MAX.
IMPEDANCE:	600 Ohms
SIGNALING:	DTMF, 70ms tone, 50ms spacing
OUTPUT:	-4.0 to -6.0dbm
ENVIRONMENTAL:	Temperature 0°C to 50°C Humidity 20%-90% non-condensating
PROGRAMMING:	Via DTMF keypad.
MEMORY RETENTION:	Non-volatile storage (does not require power)
TELEPHONE PANEL: (511 MODEL)	Brushed 14 gauge Stainless Steel
DIMENSIONS:	7 1/6∀ Wide x 11 1/4∀ High x 4 1/4∀ Deep
MOUNTING:	4 Holes spaced 10 ¾∀ x 6 ½∀ x 9/32∀
WEIGHT:	Approximately 4 lb.
WEATHERPROOF HOUSING: (531 MODEL)	Cast Aluminum
DIMENSIONS:	9 ½" Wide x 12 5/8" High x 8" deep. (including door).
MOUNTING:	4 holes spaced 8" x 5 7/8" x 13/32" (or optional pole mounting bracket)
WEIGHT:	Approximately 12 pounds.
FCC REGISTRATION:	BW88T7-13716-TE-T
RINGER EQUIVALENCY:	0.4A
TYPE JACK:	RJ11C

UL LISTED NO.: 6OF5

10.0 PARTS LIST:

QUANTITY	PART NUMBER	DESCRIPTION
4	331-006	Outer Cover Locking- Screw
1	301-018	Modular Line Cord
1	301-054	Modular Connector (RJ11C)
1	N/A	Service Manual
1	700-008	Keypad Cable
1	660-000	CEECO SPK Board
1	705-110	Connectorized Keypad
1	6020	Momentary Panel Switch
1	14123	Speaker
1	12017	Ringer
1	13070	Auto-Answer PCB

ACCESSORIES:

1	301-064	Security Tool
1	331-005	Weatherproof Housing

11.0 FCC NOTICE:

11.1 FCC REGISTRATION AND REPAIR INFORMATION

Your new telephone has been registered with the Federal Communication Commission (FCC) in accordance with Part 68 of it's rules. The FCC requires that you be advised of certain requirements involving the use of this telephone.

11.2 CONNECTION WITH THE NATIONWIDE TELEPHONE NETWORK

The FCC requires that you connect this telephone to the Nationwide Telephone Network through a registered jack provided by the Telephone Company in your area. This jack is a modular outlet, which you can order from your local telephone company.

11.3 NOTIFICATION TO THE TELEPHONE COMPANY

Before connecting this telephone, the FCC requires that you notify your local telephone company business office. The number is in the front of your phone book.

Tell them:

The "line" to which you will connect the telephone (that is, your phone number) and the telephone's FCC registration number and ringer equivalence number. These numbers are listed in Section 11.00.

The FCC further requires that you notify your local telephone company when permanently disconnecting this telephone
.

12.0 REPAIR AND RETURN INFORMATION:

12.1 WARRANTY REPAIR

Any device returned requiring warranty service; repair or credit must be accompanied with a "Return Material Authorization" (RMA) FORM. It must include return shipping instructions, original purchase order number and special marking instruction. A description of the trouble observed must be attached to the defective unit. This information must be inside the shipping container.

12.2 DIRECT ALL INQUIRES TO:

CEECO
Repair Department
863-357-0798- telephone
863-357-0006- facsimile
info@ceeco.net
www.ceeco.net

12.3 NON-WARRANTY REPAIR

CEECO will repair equipment out of warranty for a set charge plus parts. The customer must pay the shipping costs both directions.

12.4 RETURN FOR CREDIT

Material may be returned for credit only with prior approval. Material authorized for return is subject to a 20% restocking charge based on the manufacturer's list price Return RMA must be requested no later than 30 days after original shipment.

13.0 WARRANTY POLICY:

13.1 GENERAL

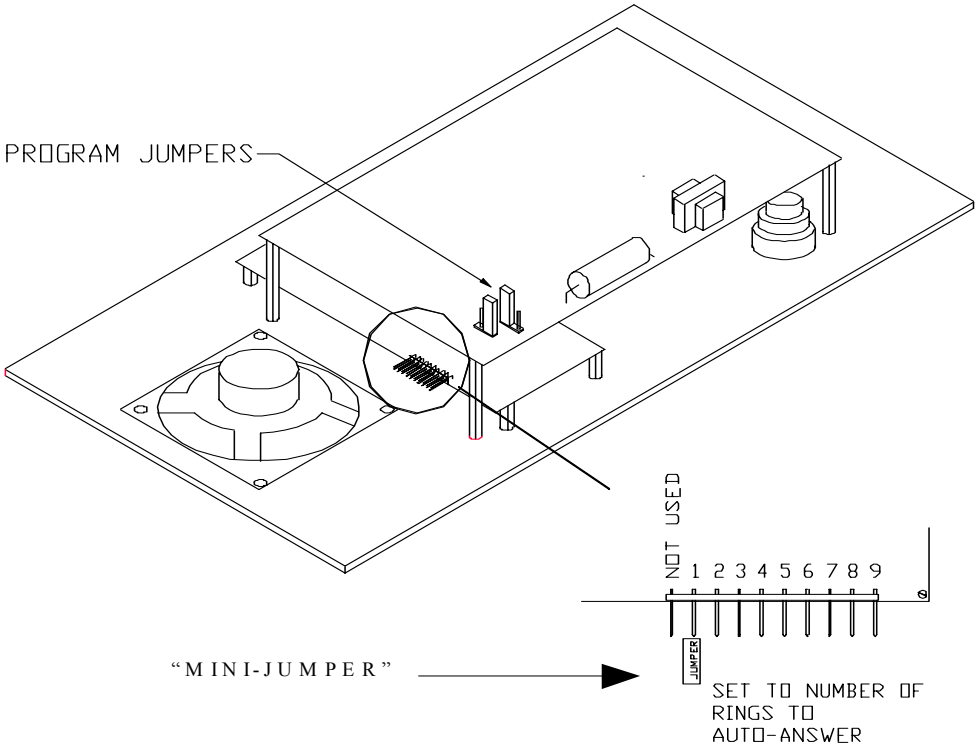
CEECO products are guaranteed to be free of defects in material and workmanship for a period of 365 days from the date of original purchase. CEECO's obligation under this warranty is limited to repair or replacement of any part found to be defective by CEECO. Under no circumstances shall CEECO be liable for loss, damage, cost of repair or consequential damages of any kind, which have been caused by neglect, abuse, act of God or improper operation of equipment. This warranty is limited to the value of material only.

13.2 PRINTED CIRCUIT BOARDS

Printed circuit boards should not be repaired in the field. If a unit is found to be faulty, replace it with another unit and return the faulty unit to CEECO for repair. Modifications by any one other than CEECO will void the warranty.

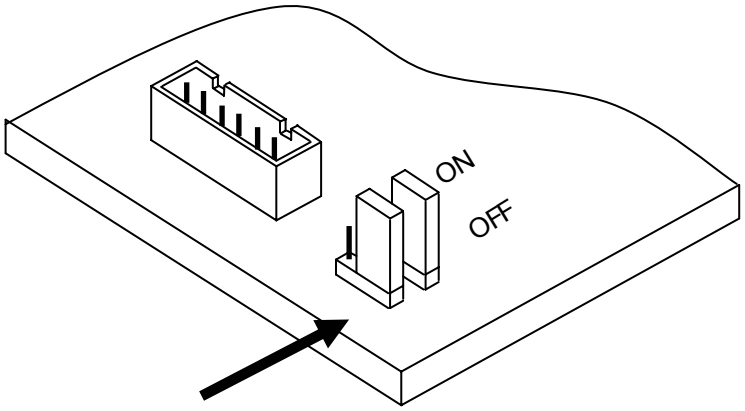
AUTO-ANSWER DIAGRAM

Location of ring-select jumpers, on lower auto-answer board:

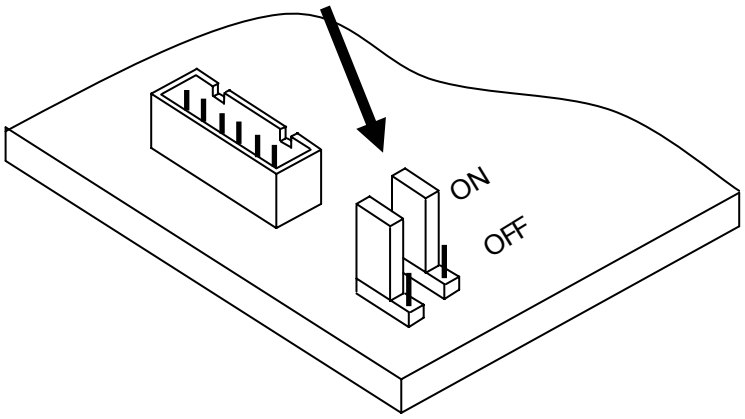


14. PROGRAMMING JUMPER DIAGRAM

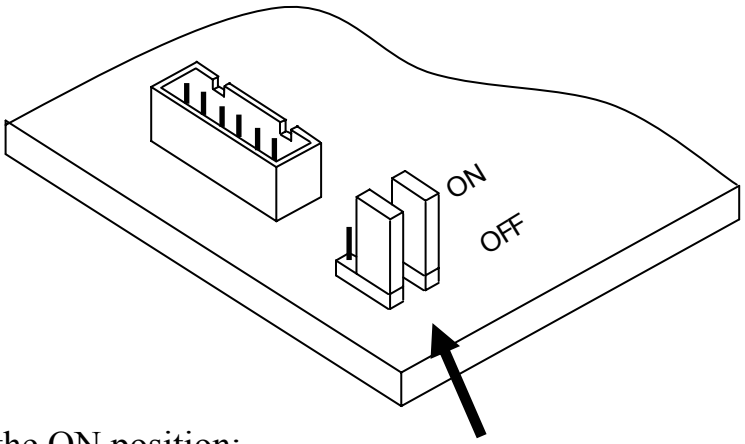
Locate the mini jumpers on the corner of the PCB.



Move the **mini jumpers** to the **ON** position **BEFORE** going off-hook.



When programming is completed, move **the mini jumpers** to the **OFF** position.



NOTE:
Do not leave the mini jumpers in the ON position; this will decrease battery life.